

## REMARKS

### I. STATUS OF THE CLAIMS

Claims 31-59 are currently pending. Of these, claim 37 is allowed.

### II. PRIOR ART REJECTIONS

Claim 31 recites, among other recitations, cutting away a portion of the multilayer film stack, wherein (a) more than one alternating layer of high refractive index material and low refractive index material of the multilayer film stack, having said portion cut away, *adjusts a wavefront phase of emerging rays*, and (b) said cutting away cuts away said portion *in accordance with an amount of adjustment of the wavefront phase*.

Claim 31 is rejected as being anticipated by Itou, US Patent No. 5,272,744 (hereafter "Itou"). The Examiner specifically refers to FIG. 6 and the disclosure in column 5, lines 37-46, of Itou.

As shown in FIG. 6(a) of Itou, a defective portion 6 exists on the surface later of multi-layer 2. Itou removes films of the multi-layer 2 in order to repair the defective portion 6. See, for example, column 5, lines 8-49, of Itou.

Therefore, in Itou, the films of the multi-layer 2 are removed in order to repair defective portion 6. In Itou, the films are NOT removed to adjust an amount of wavefront phase.

For example, column 5, lines 37-40, of Itou, specifically discloses that "the phase of X-ray reflected by the reflective multi-layer free of defect and that of X-ray reflected by the defect-repaired reflective multi-layer *are the same, exerting no influence on the projected images*." (emphasis added). More specifically, as indicated in column 5, lines 32-40, of Itou, the thickness of the removed portion of the multi-layer 2 was 67 nm, corresponding substantially to an integer multiple of  $\lambda/2 \times \cos\alpha$ , so that the phase is not changed.

Therefore, in Itou, the films are NOT removed to adjust an amount of wavefront phase.

Accordingly, Itou does not disclose or suggest that "said cutting away cuts away said portion *in accordance with an amount of adjustment of the wavefront phase*", as recited, for example, in claim 31.

In fact, since Itou specifically discloses that the phase of X-ray reflected by the reflective multi-layer free of defect and that of X-ray reflected by the defect-repaired reflective multi-layer *are the same, exerting no influence on the projected images*, it is respectfully submitted that Itou "teaches away" from the present invention as recited, for example, in claim 31.

The above comments are specifically directed to claim 31. However, various claims are rejected either solely over Itou, or over Itou as a primary reference in combination with other references. Therefore, it is respectfully submitted that the above comments are helpful in understanding various differences of various other claims over the various prior art rejections set forth in the Office Action.

\* \* \*

The above arguments were submitted in the Amendment filed December 26, 2007. However, in the Advisory Action mailed January 11, 2008, the Examiner asserts that the arguments do not place the application in condition for allowance.

More specifically, in the continuation sheet attached to the Advisory Action, the Examiner asserts that the removal of the defect in Itou is made to adjust an amount of the wavefront phase.

However, from a reading of column 5, lines 37-40, of Itou, it can be seen that the wavefront phase of the multi-layer with the defect is the same as the wavefront phase of the multi-layer after the defect is removed. To achieve this, column 5, lines 32-40, of Itou, discloses that the thickness of the removed portion of the multi-layer corresponds substantially to an integer multiple of  $\lambda/2 \times \cos\alpha$ , so that the phase is NOT changed.

To more clearly distinguish over this operation in Itou, claim 31 is amended to recite that said cutting away cuts away said portion *to thereby change the wavefront phase where said portion is cut away* in accordance with an amount of adjustment of the wavefront phase. Somewhat similar amendments are made to other independent claims.

This feature as recited, for example, in the amended claim 31, is significantly different than Itou in which the wavefront phase stays the same and is NOT changed.

\* \* \*

It is respectfully submitted that all the prior art rejections are overcome for at least the reasons described above.

### III. CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

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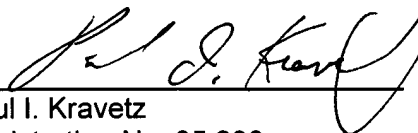
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If there are any additional fees associated with filing of this Amendment, please charge the fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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